

2113#5



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,536A

DATE: 02/21/2002

TIME: 12:48:41

Input Set : A:\30534118.app

Output Set: N:\CRF3\02212002\I965536A.raw

3 <110> APPLICANT: FEDER, J. N.
 4 MINTIER, G.
 5 RAMANATHAN, C. S.
 6 HAWKEN, D. R.
 8 <120> TITLE OF INVENTION: A NOVEL HUMAN G-PROTEIN COUPLED RECEPTOR, HGPRBMY5,
 9 EXPRESSED HIGHLY IN BRAIN AND OVARIAN TISSUES
 11 <130> FILE REFERENCE: D0041NP
 13 <140> CURRENT APPLICATION NUMBER: 09/965,536A
 14 <141> CURRENT FILING DATE: 2001-09-26
 16 <150> PRIOR APPLICATION NUMBER: 60/235,713
 17 <151> PRIOR FILING DATE: 2000-09-27
 19 <150> PRIOR APPLICATION NUMBER: 60/261,781
 20 <151> PRIOR FILING DATE: 2001-01-16
 22 <150> PRIOR APPLICATION NUMBER: 60/306,605
 23 <151> PRIOR FILING DATE: 2001-07-19
 25 <150> PRIOR APPLICATION NUMBER: 60/310,436
 26 <151> PRIOR FILING DATE: 2001-08-03
 28 <160> NUMBER OF SEQ ID NOS: 61
 30 <170> SOFTWARE: PatentIn Ver. 2.1
 32 <210> SEQ ID NO: 1
 33 <211> LENGTH: 2214
 34 <212> TYPE: DNA
 35 <213> ORGANISM: Homo sapiens
 37 <400> SEQUENCE: 1
 38 atgttctttc tacttcattt catcggtctg atcaatgtca aagattttgc actgactcaa 60
 39 ggttagcatga tcactcccttc atgccccaaaaa ggatattttc cctgtggaa ttcttaccaag 120
 40 tgcttacccc gagctttca ctgtgtatggc aaggatgact gtgggaacgg ggcggacgaa 180
 41 gagaactgtg gtgacactag tggatggcg accatatttg gcacagtgc tggaaatgct 240
 42 aacagcgtgg ccttaacaca ggagtgcctt ctaaaacagt atccacaatg ctgtgactgc 300
 43 aaagaaaactg aatttggaaatg tgtaaatggt gacttaaagt ctgtgccat gatttctaac 360
 44 aatgtgacat tactgtctc taagaaaaac aaaatccaca gtcttccaga taaagtttc 420
 45 atcaaataca caaaaactaa aaagatattt cttcagcata attgcattag acacatatcc 480
 46 aggaaaagcat tttttggatt atgtaatctg caaatattat atctcaacca caactgcattc 540
 47 acaaccctca gacctggaat attcaaagac ttacatcagc taacttggct aattcttagat 600
 48 gacaatccaa taaccagaat ttcacagcgc ttgttacgg gattaaattc ttgtttttc 660
 49 ctgtctatgg ttaataacta cttagaagct cttcccaagc agatgtgtgc ccaaatgcct 720
 50 caactcaact gggtgattt ggaaggcaat agaataaaagt atctcacaaa ttctacgttt 780
 51 ctgtcgtgcg attcgctcac agtgctgttt ctgccttagaa atcaaattgg ttttgttcca 840
 52 gagaagacat tttcttcatt aaaaaattta ggagaactgg atctgtctag caatacgata 900
 53 acggagctat cacctcacct ttttaaagac ttgaagcttc tacaaaagct gaacctgtca 960
 54 tccaatccctc ttatgtatct tcacaagaac cagttgaaa gtcttaaaca acttcagtct 1020
 55 ctagacctgg aaaggataga gattccaaat ataaacacac gaatgtttca acccatgaag 1080
 56 aatctttctc acatttattt caaaaacttt cgatactgct cctatgctcc ccatgtccga 1140

P.S
ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,536A

DATE: 02/21/2002

TIME: 12:48:41

Input Set : A:\30534118.app

Output Set: N:\CRF3\02212002\I965536A.raw

57 atatgttatgc ccttgacgga cgccatttct tcatttgagg acctcttggc taacaatatac 1200
 58 ctcagaatat ttgtctgggt tatagtttc attacctgct ttggaaatct ttttgcattt 1260
 59 ggcatgagat ctttcattaa agctgaaaat acaactcacg ctatgtccat caaaatcctt 1320
 60 tgggtgtctg attgcctgat ggggtttac ttgttcttg ttggcatttt cgatataaaa 1380
 61 taccgagggc agtatacgaa gtatgcctt ctgtgatgg agagcgtgca gtgccgcctc 1440
 62 atgggggtcc tggccatgct gtccaccgaa gtctctgttc tgctactgac ctacttgact 1500
 63 ttggagaagt tcctggcat tgcatttttttcc ttcagtaaca ttgcacotgg aaaacggcag 1560
 64 acctcagtca tcctcatttgc catctggatg gcgggatttt taatagctgt aattccattt 1620
 65 tggaaataagg attattttgg aaacttttat gggaaaaatg gagttatgtt cccactttat 1680
 66 tatgacccaaa cagaagatata tggaaagcaaa gggatttctc ttggaaatttt cctaggtgtg 1740
 67 aacttgcgg ctttctcat cattgtgttt tcctatatta ctatgttctg ttccattcaa 1800
 68 aaaaccgcct tgcagaccac agaagtaagg aattgttttgc gaagagaggt ggctgttgca 1860
 69 aatcggtttct tttttatagt gttctctgat gccatctgct ggattcctgtt atttgttagtt 1920
 70 aaaatcctt ccctcttccg ggtggaaata ccagacacaa tgacttcctg gatagtgtt 1980
 71 ttttccttc cagttAACAG tgcttgaat ccaatctct atactctcac aaccaacttt 2040
 72 tttaaggaca agttgaaaca gctgctgcac aaacatcaga ggaaatcaat ttcaaaattt 2100
 73 aaaaaaaaaaa gtttatctac atccattgtg tggatagagg actccttcctc cctgaaactt 2160
 74 ggggttttga acaaaataaac acttggagac agtataatga aaccagtttc cttag 2214

77 <210> SEQ ID NO: 2

78 <211> LENGTH: 737

79 <212> TYPE: PRT

80 <213> ORGANISM: Homo sapiens

82 <400> SEQUENCE: 2

83	Met	Phe	Phe	Leu	Leu	His	Phe	Ile	Val	Leu	Ile	Asn	Val	Lys	Asp	Phe
84	1						5					10				15
86	Ala	Leu	Thr	Gln	Gly	Ser	Met	Ile	Thr	Pro	Ser	Cys	Gln	Lys	Gly	Tyr
87							20					25				30
89	Phe	Pro	Cys	Gly	Asn	Leu	Thr	Lys	Cys	Leu	Pro	Arg	Ala	Phe	His	Cys
90							35					40				45
92	Asp	Gly	Lys	Asp	Asp	Cys	Gly	Asn	Gly	Ala	Asp	Glu	Glu	Asn	Cys	Gly
93							50					55				60
95	Asp	Thr	Ser	Gly	Trp	Ala	Thr	Ile	Phe	Gly	Thr	Val	His	Gly	Asn	Ala
96							65					70				75
98	Asn	Ser	Val	Ala	Leu	Thr	Gln	Glu	Cys	Phe	Leu	Lys	Gln	Tyr	Pro	Gln
99							85					90				95
101	Cys	Cys	Asp	Cys	Lys	Glu	Thr	Glu	Leu	Glu	Cys	Val	Asn	Gly	Asp	Leu
102							100					105				110
104	Lys	Ser	Val	Pro	Met	Ile	Ser	Asn	Asn	Val	Thr	Leu	Leu	Ser	Leu	Lys
105							115					120				125
107	Lys	Asn	Lys	Ile	His	Ser	Leu	Pro	Asp	Lys	Val	Phe	Ile	Lys	Tyr	Thr
108							130					135				140
110	Lys	Leu	Lys	Lys	Ile	Phe	Leu	Gln	His	Asn	Cys	Ile	Arg	His	Ile	Ser
111	145						145					150				155
113	Arg	Lys	Ala	Phe	Phe	Gly	Leu	Cys	Asn	Leu	Gln	Ile	Leu	Tyr	Leu	Asn
114							165					170				175
116	His	Asn	Cys	Ile	Thr	Thr	Leu	Arg	Pro	Gly	Ile	Phe	Lys	Asp	Leu	His
117							180					185				190
119	Gln	Leu	Thr	Trp	Leu	Ile	Leu	Asp	Asp	Asn	Pro	Ile	Thr	Arg	Ile	Ser
120							195					200				205

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/965,536A

DATE: 02/21/2002

TIME: 12:48:41

Input Set : A:\30534118.app

Output Set: N:\CRF3\02212002\I965536A.raw

122 Gln Arg Leu Phe Thr Gly Leu Asn Ser Leu Phe Phe Leu Ser Met Val
 123 210 215 220
 125 Asn Asn Tyr Leu Glu Ala Leu Pro Lys Gln Met Cys Ala Gln Met Pro
 126 225 230 235 240
 128 Gln Leu Asn Trp Val Asp Leu Glu Gly Asn Arg Ile Lys Tyr Leu Thr
 129 245 250 255
 131 Asn Ser Thr Phe Leu Ser Cys Asp Ser Leu Thr Val Leu Phe Leu Pro
 132 260 265 270
 134 Arg Asn Gln Ile Gly Phe Val Pro Glu Lys Thr Phe Ser Ser Leu Lys
 135 275 280 285
 137 Asn Leu Gly Glu Leu Asp Leu Ser Ser Asn Thr Ile Thr Glu Leu Ser
 138 290 295 300
 140 Pro His Leu Phe Lys Asp Leu Lys Leu Gln Lys Leu Asn Leu Ser
 141 305 310 315 320
 143 Ser Asn Pro Leu Met Tyr Leu His Lys Asn Gln Phe Glu Ser Leu Lys
 144 325 330 335
 146 Gln Leu Gln Ser Leu Asp Leu Glu Arg Ile Glu Ile Pro Asn Ile Asn
 147 340 345 350
 149 Thr Arg Met Phe Gln Pro Met Lys Asn Leu Ser His Ile Tyr Phe Lys
 150 355 360 365
 152 Asn Phe Arg Tyr Cys Ser Tyr Ala Pro His Val Arg Ile Cys Met Pro
 153 370 375 380
 155 Leu Thr Asp Gly Ile Ser Ser Phe Glu Asp Leu Leu Ala Asn Asn Ile
 156 385 390 395 400
 158 Leu Arg Ile Phe Val Trp Val Ile Ala Phe Ile Thr Cys Phe Gly Asn
 159 405 410 415
 161 Leu Phe Val Ile Gly Met Arg Ser Phe Ile Lys Ala Glu Asn Thr Thr
 162 420 425 430
 164 His Ala Met Ser Ile Lys Ile Leu Cys Cys Ala Asp Cys Leu Met Gly
 165 435 440 445
 167 Val Tyr Leu Phe Phe Val Gly Ile Phe Asp Ile Lys Tyr Arg Gly Gln
 168 450 455 460
 170 Tyr Gln Lys Tyr Ala Leu Leu Trp Met Glu Ser Val Gln Cys Arg Leu
 171 465 470 475 480
 173 Met Gly Phe Leu Ala Met Leu Ser Thr Glu Val Ser Val Leu Leu
 174 485 490 495
 176 Thr Tyr Leu Thr Leu Glu Lys Phe Leu Val Ile Val Phe Pro Phe Ser
 177 500 505 510
 179 Asn Ile Arg Pro Gly Lys Arg Gln Thr Ser Val Ile Leu Ile Cys Ile
 180 515 520 525
 182 Trp Met Ala Gly Phe Leu Ile Ala Val Ile Pro Phe Trp Asn Lys Asp
 183 530 535 540
 185 Tyr Phe Gly Asn Phe Tyr Gly Lys Asn Gly Val Cys Phe Pro Leu Tyr
 186 545 550 555 560
 188 Tyr Asp Gln Thr Glu Asp Ile Gly Ser Lys Gly Tyr Ser Leu Gly Ile
 189 565 570 575
 191 Phe Leu Gly Val Asn Leu Leu Ala Phe Leu Ile Ile Val Phe Ser Tyr
 192 580 585 590
 194 Ile Thr Met Phe Cys Ser Ile Gln Lys Thr Ala Leu Gln Thr Thr Glu

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/965,536A

DATE: 02/21/2002
TIME: 12:48:41

Input Set : A:\30534118.app
Output Set: N:\CRF3\02212002\I965536A.raw

195	595	600	605	
197 Val	Arg Asn Cys Phe Gly Arg Glu Val Ala Val Ala Asn Arg Phe Phe			
198	610	615	620	
200 Phe Ile Val Phe Ser Asp Ala Ile Cys Trp Ile Pro Val Phe Val Val				
201	625	630	635	640
203 Lys Ile Leu Ser Leu Phe Arg Val Glu Ile Pro Asp Thr Met Thr Ser				
204	645	650	655	
206 Trp Ile Val Ile Phe Phe Leu Pro Val Asn Ser Ala Leu Asn Pro Ile				
207	660	665	670	
209 Leu Tyr Thr Leu Thr Thr Asn Phe Phe Lys Asp Lys Leu Lys Gln Leu				
210	675	680	685	
212 Leu His Lys His Gln Arg Lys Ser Ile Phe Lys Ile Lys Lys Lys Ser				
213	690	695	700	
215 Leu Ser Thr Ser Ile Val Trp Ile Glu Asp Ser Ser Ser Leu Lys Leu				
216	705	710	715	720
218 Gly Val Leu Asn Lys Ile Thr Leu Gly Asp Ser Ile Met Lys Pro Val				
219	725	730	735	
221 Ser				
225 <210> SEQ ID NO: 3				
226 <211> LENGTH: 17				
227 <212> TYPE: DNA				
228 <213> ORGANISM: Homo sapiens				
230 <400> SEQUENCE: 3				
231 ccacgcgtcc gattaca			17	
234 <210> SEQ ID NO: 4				
235 <211> LENGTH: 1026				
236 <212> TYPE: DNA				
237 <213> ORGANISM: Homo sapiens				
239 <400> SEQUENCE: 4				
240 caatcatttt ggatactgg actttcagtg gactaccta aacaggggac agcttttgg 60				
241 agatgacatc tgcaatgctt ttcatcttta ccaacggcaa gcctttctgc acagagagca 120				
242 cagcagaatg gctcctgtca ctgcattcca atggcagctg tactatctac caaccgtgct 180				
243 gaggacagca ccaaaggttc ctctcctcac cccacatgcc taaaaagcac atgtgaattc 240				
244 gtgtatagtg ggctgaggtg cagctgatct ctagcta aacacaaccc accaacaat 300				
245 gaccacaggt tggcaactgtg tggcttttca catcggttg cactgtccat gaaatagaaa 360				
246 cactcacaac atctgattcc agtgtggcca taataacaga aatctaacaa ctcttcctt 420				
247 gcctttcaa tatcaaataa aaccatcagc atcctgctgg attgata gca aaggatttcc 480				
248 aaaatattca tctacccgaa gtcctcctc gtgaaggccg gtggagtagc cactttgaaa 540				
249 acagaacttc caaccaggtt accatgtcta acctatgacc agagagtcc actgatgaag 600				
250 cctcatacca tttgcctttt ggattttatt taatatcaga agagatgaat tcttaagata 660				
251 ttttctgaa ggttccccag ggcacaaaaca aattggacac tttcactgct aaaaagtaca 720				
252 cttaatattt cttaaagtat aatttctta gagcagtatc cctattgctg gcaagttctg 780				
253 ctttcataaaa atatgcagat aagaagtgtt aaatggatt caagaattat ggttttattt 840				
254 gggactgttt gcataactcac aatggtttg ttctcattgt ttttaacaaa aaagcaatga 900				
255 agtttgggtt ggtttttga aaacgaaact gaaaaaaatt atatgtaaaa atgagaactg 960				
256 ggttaataaaa attatatttt gaaaaaaaaaaa aaaaaaaaaaaa aaaaaaaaaaaa 1020				
257 aaaaag			1026	
260 <210> SEQ ID NO: 5				
261 <211> LENGTH: 2142				

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/965,536A

DATE: 02/21/2002
TIME: 12:48:41

Input Set : A:\30534118.app
Output Set: N:\CRF3\02212002\I965536A.raw

```

262 <212> TYPE: DNA
263 <213> ORGANISM: Homo sapiens
265 <400> SEQUENCE: 5
266 atgttcttc tacttcattt catcggtctg atcaatgtca aagattttgc actgactcaa 60
267 ggttagcatga tcactccccc atgccaaaaa ggatattttc cctgtggaa tcttaccaag 120
268 tgcttaccggc gagctttca ctgtgtatggc aaggatgact gtgggaaacgg ggcggacgaa 180
269 gagaactgtg gtgacactag tggatggcg accatatttgc gcacagtgc tggaaatgtct 240
270 aacagcgtgg ccttaacaca ggagtgcctt ctaaaaacagt atccacaatg ctgtgactgc 300
271 aaagaaaactg aatttggaaatg tgtaaatgtt gacttaaagt ctgtgccat gatttcta 360
272 aatgtgacat tactgtctt taagaaaaac aaaatccaca gtcttccaga taaagttttc 420
273 atcaaataca caaaaacttaa aaagatattt cttcagcata attgcattag acacatatcc 480
274 agggaaagcat tttttggatt atgttatctg caaatattaa ttcttagatga caatccaata 540
275 accagaattt cacagcgctt gtttacgggaa ttaaatttctt tggttttccct gtctatggtt 600
276 aataactact tagaagctct tcccaagcag atgtgtgccc aaatgcctca actcaactgg 660
277 gtggattttgg aaggcaatacg aataaagtat ctcacaaattt ctacgtttctt gtctgtgcgtat 720
278 tcgctcacag tgctgtttctt gccttagaaat caaatttgggtt ttgttccaga gaagacattt 780
279 tcttcattaa aaaattttagg agaactggat ctgtctagca atacgataac ggagctatca 840
280 cctcacctt ttaaagactt gaagcttctt caaaagctga acctgtcatc caatcctt 900
281 atgtatcttc acaagaaccca gtttggaaatg cttaaacaac ttcatgtctt agacctggaa 960
282 aggatagaga ttccaaatataa aacacacaga atgttcaac ccattgttttgc tctttctcac 1020
283 atttatttca aaaactttcg atactgtctt tatgtctcccc atgtccgaat atgtatgccc 1080
284 ttgacggacg gcatttcttc atttgaggac ctcttggcta acaatatccctt cagaatattt 1140
285 gtctgggtta tagcttcat tacctgtttt gggaaatctt ttgtcatgg catgagatct 1200
286 ttcattaaag ctgaaaatac aactcacgct atgtccatca aaatccctt tggtgctgat 1260
287 tgcctgtatgg gtgtttactt gttttttttt ggcattttcg atataaaaata ccgagggcag 1320
288 tatcagaagt atgccttgcgt gtggatggag agcgtgcagt gccgcctcat ggggttctt 1380
289 gccatgtgt ccacccaaatg ctctgttctg ctactgaccc acttgactt ggagaagttc 1440
290 ctggtcattt tttcccccattt cagtaacattt cgacctggaa aacggcagac ctcaatgtcatc 1500
291 ctcatgtca tctggatggc gggatttttta atagctgtaa ttccatttttgaataaggat 1560
292 tattttggaa acttttatgg gaaaaatgaa gtatgttcc cactttttaa tgaccaaaca 1620
293 gaagatatttggaa gaagccaaagg gtattcttttcc ggaattttcc taggtgtgaa cttgctggct 1680
294 tttctcatca ttgtgttttc ctatattactt atgttctgtt ccattcaaaa aaccgcctt 1740
295 cagaccacacaa aagtaaggaa ttgttttggaa agagagggtgg ctgttgcataa tcgtttctt 1800
296 ttatagttgt tctctgtatgc catctgtgg attctgtat ttgttagttt aatcccttcc 1860
297 ctcttccggg tggaaatacc agacacaaatg acttccttggaa tagtgtat tttcccttcca 1920
298 gttaacagtg ctgttgcataa aatcccttcat acttcacaa ccaactttttaa taaggacaag 1980
299 ttgaaacacaa tgcttgcataa acatcagagg aaatcaattt tcaaaaatcaa aaaaaaaaaatgt 2040
300 ttatctacat ccattgtgtg gatagaggac tcctttccc tggaaacttgg ggttttgaac 2100
301 aaaataaacac ttggagacacaa tataatgaaa ccagtttctt ag 2142
304 <210> SEQ ID NO: 6
305 <211> LENGTH: 713
306 <212> TYPE: PRT
307 <213> ORGANISM: Homo sapiens
309 <400> SEQUENCE: 6
310 Met Phe Phe Leu Leu His Phe Ile Val Leu Ile Asn Val Lys Asp Phe
311 1 5 10 15
313 Ala Leu Thr Gln Gly Ser Met Ile Thr Pro Ser Cys Gln Lys Gly Tyr
314 20 25 30
316 Phe Pro Cys Gly Asn Leu Thr Lys Cys Leu Pro Arg Ala Phe His Cys

```

Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/965,536A

DATE: 02/21/2002

TIME: 12:48:42

Input Set : A:\30534118.app

Output Set: N:\CRF3\02212002\I965536A.raw

L:1772 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29

L:1773 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29

L:1791 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30

L:1792 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30